

## ABSTRACT

A determining circuit 213 of a mobile station measures the number of paths of a forward link. In a case where the number of paths is smaller than a threshold value, the determining circuit 213 determines that execution of an operation for changing an antenna is necessary. In the other case, the determining circuit 213 determines that execution of an operation for changing an antenna is unnecessary. A multiplexing circuit 214 multiplexes a control signal, which puts the determination result of determining circuit 213 thereon, into transmission data to be transmitted. In a base station apparatus, the control signal is separated from the received signal, and it is determined whether or not the operation for changing the antenna is executed. This makes it possible to execute the operation for changing transmission antenna only when reception quality is improved by changing transmission antenna, and to suppress execution of the change of transmission antenna to a minimum.